

with, and produced by, a vascular and granular, or, (what is more infrequent,) a cutaneous state of the palpebral conjunctiva; but, whether this condition of the palpebral conjunctiva be present or otherwise, whether the mucous covering of the cornea be merely thickened and rendered opaque, or, in addition to this thickened and opaque state be also vascular, Mr. M. says that the use of the nitrate of silver ointment is equally called for, and promises the most speedy and material relief. Of course it would be desirable to cure any defect requiring operation for its removal, which appeared to be maintaining and increasing this morbid condition of the cornea, before having recourse to the ointment; for instance, there may be an incurvation of the tarsal cartilage, an irregularity in the growth of one or more of the eye-lashes, or an inversion of the whole of the eye-lashes, from their unnatural position at the inner border of the tarsal margin, which having produced the alteration in the translucency of the cornea, to which I am now adverting, it would be advisable, indeed, indispensably requisite, to remove, as a preliminary measure to the adoption of any curative plan of treatment whatever. But the mere removal of this defective condition of the tarsal cartilage, the integuments of the eye-lids, or the direction of the eye-lashes, will not be sufficient to restore the translucency of the cornea; and it is with a view of curing the effects any one of these conditions may have produced, and which the mere removal of the cause which produced them, will not accomplish, that the present plan of treatment is proposed.—*Ibid.*

58. *Chloruret of Lime in Purulent Ophthalmia.*—We have already noticed, Vol. I. p. 459, the chloride of lime having been successfully employed by Dr. Varlez of Brussels, and Mr. Guthrie of London, in the treatment of purulent ophthalmia. In a late number of the *Journ. Comp. des Sc. Med.* Dr. HERZBERG relates four cases, in which he employed this remedy with advantage.

We have ourselves employed it in a few cases, but without the striking benefits we were led to expect from the representations of others. It will require further experience to determine its real value.

SURGERY.

59. *Excision of Scirrhus Rectum.*—Mr. LISFRANC has excised the lower extremity of the rectum in nine cases, of which six were successful, for the removal of what is termed by French surgeons, cancer. The peritoneum descends along the front of the rectum to six inches from its extremity in women, to four inches from the same in man. By means of an ovoid incision in the skin around the anus, the rectum can readily be drawn out behind, and any kind of instrument may be applied to it; there exists a second sphincter above the first. M. Lisfranc has removed as much as three inches and a half of the rectum, and he recommends the operation whenever the forefinger can reach beyond the upper margin of the disease, and when the cellular texture, external to the gut is sound. The operator must bear in mind that the antero-posterior diameter of the perinæum is generally one inch, the distance of the anus from the coccyx eighteen lines, and that between the anus and the base of the same bone two inches, that considerable portions of the rectum may be removed laterally and posteriorly without wounding the vagina in woman, or the urethra in man; and finally, that hæmorrhage may always be arrested by pressure or by ligatures. In the performance of the operation the patient is to be placed as in the lateral operation for lithotomy—two semilunar incisions are to be made around the anus—and the rectum to be insulated in its inferior extremity, drawn down by the forefinger introduced into its cavity, and cut off by means of scissors. After the cure, the fæces are sometimes voided in the usual manner, sometimes a *bouirelet* is formed internally, and takes the place of the sphincter, sometimes

there is incontinence of liquid feces, and sometimes the patient is obliged to stuff the rectum with lint.—*Med. Chirurg. Review*, July, 1831.

60. *Extirpation of Cancer of the Rectum.*—M. MAURIN also has performed this operation successfully on a patient, at the Hospital of Versailles. The patient was a man thirty-one years of age, of delicate constitution, who presented himself to M. Maurin in the beginning of September, 1828, complaining that he could not procure a stool, except by the aid of enemata; and that he felt great weight and acute pains in the rectum. On examination by the finger, a hard and irregular tumour was discovered, about two inches from the anus, ulcerated in the centre, and discharging a sanious ichor, of a most intolerable fetor. The mobility of the tumour, notwithstanding its distance from the orifice of the gut, induced the surgeon to entertain the idea of extirpation. Baron Dupuytren was consulted on the 17th of September, and made the following note: "There exists about two inches from the orifice of the rectum a carcinomatous tumour, occupying one side of the gut, to the extent of about two inches. There is no chance of a cure, except by an operation—and this operation must be both difficult and dangerous. If the patient shall make up his mind to the risk of the operation, I am ready to attempt it." *Sept. 21st.* Encouraged by this opinion of so celebrated a surgeon, M. Maurin himself determined to operate. For this purpose he made an incision through the posterior and left part of the sphincter, by means of a probe-pointed bistoury, when the tumour was seized by a kind of tenaculum, and drawn downwards gradually and gently, till it appeared in view, when it was carefully removed by means of scissors. When taken out, it was found to be of an oval form, a little flattened, and two inches in length, with an ulceration on one side. It was of a very compact tissue. The operation was very painful, and considerable hæmorrhage attended, but was soon arrested by stuffing the rectum. In the course of five hours after the operation the patient experienced acute pains in the epigastrium, with dysury, sharp fever, and intense thirst. Two bleedings relieved these symptoms, and he slept some in the course of the night. In the morning the pulse was reduced from 140 to 100, and the patient was again bled. When the dressings were removed, there issued a considerable quantity of pus with blood. In the course of the succeeding days the state of the patient was improved—the purulent discharge lessened—the lancinating pains ceased, and, by the 15th of November, the discharge was almost nothing. Consistent and spontaneous stools were passed. On the 1st of December the wound in the sphincter was found to be cicatrized. On the 8th of the same month, the patient was discharged from the hospital cured. He experienced no difficulty or pain in passing his motions.—*Ibid*, *Revue Medicale*, Feb. 1831.

61. *Excision of Ulcer of the Rectum.*—This operation has been performed by Mr. Mayo, at the Middlesex Hospital. The patient was a female, thirty-eight years of age, who, for two years previously had experienced pain in the rectum, when the bowels were evacuated. This increased in severity, and was attended by unpleasant sensations about the loins, &c. and some sanguineous discharge. In December, 1830, she entered the Middlesex, labouring under severe pains in the rectum, with the occasional issue of pus and blood.

On examination of the rectum, it was found to be indurated and ulcerated to the extent of two inches; but the finger could be passed beyond the diseased part into a healthy gut. Various remedies were tried, but in vain. Mr. Mayo then determined on an operation.

"The operation was performed on the 25th of February, in the following manner:—the patient was laid upon her side, with the hips and knees bent. The fingers being then introduced into the rectum, the knife was plunged into the perinæum, on one side of the bowel, and, an incision of some depth being thus made laterally, the dissection was continued forwards from thence, so as to separate the vagina from the rectum. The dissection was then continued

entirely round the rectum, including half an inch of integument, with the sphincter muscle. By this means, a length of two inches and a half of the extremity of the rectum was separated from the adjacent parts: it was then cut off with scissors from the sound rectum above. The operation was performed slowly, and the vessels, about nine in number, were tied as they were divided. The patient lost about twelve or fourteen ounces of blood."

In about two hours after the operation, and when the smarting of the wound had subsided, she observed that she found herself entirely relieved from the pain and distress to which she had been subject for so many months. The appearance of the wound is singular. The extremity of the bowel is not more than half an inch from the cut edge of the skin, and the intervening granulations are healthy and rapidly cicatrizing. The bowels act regularly once a day; and the patient is aware of the presence of the fæces in the rectum. In about five minutes after this sensation is perceived, the bowels act much in the usual manner, though it is evident that there can be nothing at present equivalent to a sphincter muscle. A hope is entertained that when the wound is cicatrized and contracted, the patient will have some power of retaining solid fæces. — *Lond. Med. and Phys. Journal, April, 1831.*

It is stated in a subsequent No. of the Journal, (that for June,) from which we take the report of this case, that the general health of the woman was improved, and the sufferings she experienced from the disease entirely removed by the operation. She can even *perfectly retain* her fæces. As might be expected, however, when she is under the influence of purgative medicine, the contents of the bowels are discharged rather quickly; but it seems far from impossible that, in time the firm cicatrix at the wound, assisted by the action of the muscular fibres of the bowel itself, will form a sufficient substitute, on all occasions, for the sphincter muscle, which has been removed.

62. *Amputation of the Thigh at the Hip-Joint.*—In the *Glasgow Medical Journal* for August last, a case of this, terminating successfully, is related by Dr. CHARLES BRYCE. The subject of the case was a Greek soldier, twenty-three years of age, who was wounded by a six pound ball, at the battle of Athens, on the 6th of May, 1827. The ball struck the posterior and lateral part of the left thigh, immediately below the trochanter. The integuments and muscles of the hip and thigh were very extensively torn and removed. The trochanter, neck and four inches of femur were broken into minute pieces, but the femoral vessels were untouched, and the mass of flesh on the inside, formed by the adductors, vastus internus, and gracilis, was uninjured. The person complained much of pain, from the distortion of limb, but suffered little from weakness or depression. The bleeding from the wound was inconsiderable. Some wine being given him, and the leg disposed as favourably as circumstances would permit, he was conveyed on board an hospital ship. Upon examining the limb, in reference to an operation, the gentlemen assisting coincided in opinion, that amputation was authorized under the most favourable circumstances, and that, in our actual state of disturbance and movements, any delay of operation was quite inadmissible. The plan of proceeding was readily determined on, and executed without difficulty, in the following manner:—Firm pressure being made by the cross-piece of the screw of a tourniquet and a pad on the external iliac, immediately above Poupart's ligament, a convex incision was made across the highest part of the thigh and hip, passing from the inside of the sulcus of the blood-vessels, to an inch and a half behind the trochanter, including in this convexity and extent the torn superior circumference of the wound, and exposing the capsular ligament of the joint.

The femoral artery was now secured above the branching off of the circumflex and profunda. The capsule and round ligament were next divided, the acetabulum exposed, and the head of bone drawn out. The amputating knife was again taken, and, observing the particular shape of the upper incision, a corresponding flap was formed, by a double stroke of the knife, from the inner

and under part of the thigh, in which the fractured portions of the bone, and the contused and lacerated soft parts were included. The arteries were now secured, and the wound cleared of blood. Notwithstanding frequent ablutions of the wound with cold water, there existed a troublesome oozing of blood, without our being able to detect its sources, by which, and the fatigue of the operation, the patient became exhausted. Wine and assuring language restored him somewhat. It was evidently dangerous to dress the wound immediately; and leaving, therefore, its surface uncovered, exposed to the air, (a method frequently had recourse to in other similar cases,) we proceeded to another amputation. By this management the wound became so dry, after a few minutes, as to allow the operation to be satisfactorily finished. The flap covered very well the face of the wound, and was easily retained in proper contact by strips of adhesive plaster. The common dressings were applied, and a double-headed roller was carefully adapted to the peculiar form of the hip. An anodyne was exhibited, and six hours after the operation he was composed, and had slept; no pain nor bleeding from the wound.

The irregular movements of the army and navy, in consequence of the melancholy event of this battle, forced Dr. B's attendance elsewhere, and prevented him seeing the patient before the fourth day of the operation, when he found him conveyed to Poros, truly well, considering the many privations and hardships the poor fellow had undergone during the preceding days. The edges of the wound, though irritated, showed no disposition to separate, nor was the flap tense or swollen. The general system suffered from febrile feelings, anxiety, and restlessness, but the disturbance was not greater than the irregular and neglected state of his bowels, and the irritation in the stump could account for. Upon the whole, Dr. B. was agreeably disappointed in his expectations of his condition; and entertained sanguine hopes of his recovery, more especially that some arrangement had been made to ensure professional attendance on the wounded. During two days Dr. B. was at Poros, the patient recovered from every untoward symptom, and the wound was dressed and looked well. When Dr. B. returned to this place, after six weeks, he was delighted to see his patient completely cured and healthy.

63. *Lithotrity*.—M. SEGALAS has communicated to the Royal Academy of Medicine, the case of a man, forty-five years of age, who, for the relief of dyspepsia, caused by mental and physical fatigue, was restricted to a vegetable diet, consisting in great part of sorrel. Two paroxysms of violent nephritic colic soon supervened, and frequent hematuria. A urinary calculus was detected by the lithonriptor, and it was removed at a single operation. Chemical examination showed it to consist of oxalate of lime. M. Segalas offers two remarks in relation to this case: 1st, that the calculus, which could not be detected in two examinations with the sound, was afterwards detected with the lithonriptor; 2d, that lithotrity has here cured a patient in a single sitting, who was too nervous to submit to lithotomy.—*Archives Générales*, May, 1831.

64. *Lacerated wound of the Perinæum, with fracture of the bones of the Pelvis—Recovery*.—The following case related by GEORGE C. RANKIN, Esq. in a recent number of the *London Medical Gazette*, affords an interesting example of the powers of nature. A farmer of Upper Canada was crossing a narrow dam, "when meeting a loaded cart he unfortunately locked his wheel, and in backing to extricate himself lost his balance and fell out of the cart over the dam; the horse continuing to back went over also, with the cart, and was killed on the spot. The dam was about 30 feet high, and the cart fell over the man. The first sight showed a part of the sphincter ani, the whole perinæum and scrotum, torn away, in the form of a triangle, the apex of which was at the anus, and lying over the penis on the abdomen, leaving the testes perfectly denuded, and suspended like two eggs. How, under such circumstances, they escaped entire destruction, I cannot conceive. On a nearer inspection, I found the subja-

cent soft parts in a dreadful state of laceration, a part of the ramus of the ischium gone, and the ischium itself fractured between its tuberosity and the acetabulum; the left crus of the penis and urethra divided; and, on passing my fingers under the testes, removed several portions of the os pubis, which were apparently chipped off as if by some sharp instrument, and which, as well as a large portion of the ramus, I have preserved. In addition to the above, the right arm was so completely shattered, that I was under the necessity of amputating it some days after, not with any hope of ultimate recovery, but merely to relieve the patient from the pain which the splintered bones occasioned.

"Looking upon this as a desperate case, I merely replaced the parts *in situ*, ordered poultices to be constantly applied, and the patient to be kept as quiet as possible. In this state he continued, labouring under the greatest excitement, until the 26th, about the tenth day after the accident, when I perceived that the injured soft parts had entirely sloughed off, the stump still continuing a good deal swollen. On the 28th, that state of collapse consequent on too great excitement, and which I had looked forward to as the event which was to put an end to his sufferings, was strikingly depicted on his cadaverous countenance; the stump was flaccid, and the wounds put on a languid appearance. I ordered wine to be given freely, and had the unexpected pleasure of seeing him something better on the 30th, and complaining of the pain occasioned by the pointed bones. Removed such parts of the ramus as I could get at with the bone-nippers, and succeeded in extracting two or three small splinters of the pubes, which had caused much irritation. From this time he appeared evidently to improve; the stump, as well as the wound, soon began to show a secretion of healthy pus. At the end of a month from the amputation the stump was quite healed, and in another fortnight the injured bones of the pelvis had completely exfoliated, and healthy granulations were fast filling up the frightful void which had been made in the soft parts; and in the beginning of March (1830,) instead of my visiting him as formerly, he came to me as long as the snow lasted, in a sledge; his long confinement in the recumbent posture, having afforded ample time for the tuberosity of the ischium to reunite to the body of the bone, so that he could very soon sit up without much inconvenience.

"The only thing further to be done for him was to endeavour to reëstablish the natural passage for the urine, instead of allowing it to continue to pass by the perinæum. This I attempted, and though unsuccessful, am still perfectly convinced of its practicability. After introducing the catheter, and irritating the edges of the wound, adhesive plaster was applied, and I feel confident would, in forty-eight hours, have secured a union by the first intention, had it been allowed to remain; but, to my great disappointment, I found next day that the catheter had been removed by some officious friend, and I could not prevail on him again to permit its introduction. I would not be surprised, however, to hear that nature had ere this done for him what he would not permit to be done by art; for when I last saw him, in August, 1830, he informed me that when he opposed any obstacle, as the end of his finger, to the passage of the water by the perinæum, it readily passed through the urethra.

"During the whole course of this case, the only prescriptions used were pectoral mixtures, to relieve a very troublesome and irritating cough, and an occasional aperient; and after the discontinuance of the poultices, the cerat. calamin. with lotions of sulph. zin. and an occasional touch of nit. argent. to keep down luxuriant granulations, were the only local applications found necessary.

"Of all the cases which fall into the hands of the practitioner in surgery for treatment, there are perhaps none from which he may obtain more credit to himself, in great measure at the expense of nature, than in extensive lacerated wounds; the alarm which any loss of substance invariably excites amongst the ignorant in surgery naturally inclining the patient to bestow all the credit upon his attendant, which the surgeon himself is content, in his own mind, to divide with nature.

"I am not aware of there being any case on record, accompanied with so many discouraging circumstances as the above, in which the patient has recovered; and the only object in view in preserving it, (as such cases are fortunately of rare occurrence,) is to afford another proof of the almost entire dependence to be placed, under such circumstances, in the *vis medicatrix nature*."

65. *Traumatic Tetanus*.—The following cases of tetanus reported in the *Glasgow Medical Journal* for February last, by ROBERT PERRY, M. D. senior surgeon to the Glasgow Royal Infirmary are interesting from some of the appearances noticed on dissection.

Case I. Patrick Vallily, ætat. 15. 17th April, 1830. A few hours ago, while sitting near the funnel of a steam-boat engine, the boiler exploded, and he was lifted into the air. Both legs and posterior part of left thigh are extensively vesicated, both arms and shoulders slightly so, occasioned by the hot water thrown on him. Pulse quick and feeble, has had no vomiting. Sumat. stat. tinct. opii. gtt. xl.

18th, Occasional vomiting; in other respects easy. Hab. opii. gr. i. vesp.

19th, Seems confused, but no return of vomiting; complains only of pains of abdomen, which is slightly tender on pressure. Tongue white and moist; pulse 100; bowels open. Cont. opii. gr. i. vesp. Adhibeant. abdomeni, hirud. xii.

20th, A rigor this morning; half an hour after was bled to 9 oz. Blood first cup buffy. Complains of slight pain of abdomen on motion, but there is no tenderness on pressure. Pulse 100; tongue white; thirst; bowels slow. Rep. infus. sennæ c. sulph. magnes.; Vesp. rep. venesect.

21st, Bled to six ounces. Pulse 120; tongue less white; bowels open. Feels much easier.

26th, Since last bleeding has continued much easier. Pulse has fallen in frequency, and tongue cleaning.

29th, Convalescent till 27th, when complained of pain in abdomen; not increased on pressure; had an opiate, which was repeated last night; to-day was found lying on his back, head retracted, and muscles of the head and trunk rigid; countenance anxious, and features retracted. Slight difficulty on deglutition, but can open his mouth pretty freely. Pulse 105; tongue whitish at edges, brownish and dry in centre. Sum. st. calom. ℥i. et post hor. tres infus. sennæ donec plen. deject. alv.; Post. sol. alvi hab. enem. c. tinct. opii. ℥i.; Spin. applic. vesicat.

30th, Physic operated well, and in the evening less permanent rigidity of the muscles, but the accumulation of phlegm in trachea most annoying. Spasms increase in frequency. Complains of pain in the region of the heart. Pulse 124; tongue brown and dry in centre. Sum. 3tia q. q. h. calom. gr. x. c. opii gr. iss.; Curet. pars vesicat. ungt. sabinæ.

May 1st, It was at this date the patient came under my care. Since last report the spasms of the muscles of the trunk have become more severe and permanent; less able to open his mouth, severe pain at epigastrium, no stool for the last 24 hours, has continued the calomel. To have powdered opium sprinkled on the vesicated portions of legs.

2d, Thirst urgent. Tongue dry; pulse 110. R. Ol. croton. gtt. iii. pulv. sacc. gr. vi. M. et divid. in d. iii. Sum 1 3tia q. q. h. Applic. catap. com. vesicationibus. Omit. p. opii.

3d, Has had several dark stools from the croton oil; tension, and pain of abdomen, diminished, but spasms still continue. Pulse in the morning feeble, but become stronger since taking a little wine. 4 P. M. Pulse sunk considerably; in consequence of which, 4 oz. of spirit were ordered to be taken in divided doses with warm water and sugar. Spasms continued till 5 next morning, when he died. The body was immediately placed with the face to the floor.

Inspection 24 hours after death. The whole spinous processes and calvarium were removed, the brain and thecæ vertebrarum fully exposed. There was a little serous fluid at the base of the brain, betwixt the tunica arachnoidea and

pia mater. The brain was considerably more vascular than usual, and on the posterior part of both lobes of the cerebellum there existed an ecchymosed appearance, which could easily be removed by raising the pia mater. The medulla spinalis had a perfectly healthy appearance, but a considerable quantity of partly fluid, partly coagulated blood, existed betwixt the theca and the vertebræ. The vesicated surfaces occupied the lower half of the left leg, and the outer and lower half of the right leg. Both had a green sloughy aspect, and the cellular substances was much inflamed. The veins did not appear more vascular than natural, and the arteries appeared healthy. The nerves were also carefully examined; the cutaneous of both legs, particularly the communicans tibialis and the communicating branches of the peroneal nerve with the tibialis communis, were inflamed at the seat of the injury; tracing them upwards above this point they were perfectly healthy, except that portion of the peroneal which turns over the head of the fibula, there it was again distinctly very vascular, thus leaving an intermediate portion perfectly free from the appearances of inflammation. The vascularity appeared to be confined to the sheath of each nerve; the deep-seated branches appeared to be quite natural. No other morbid appearances were detected.

Case II. William Fleming, ætat. 17. 22d July, 1830. Eight days ago, the ring and middle fingers of the right hand were drawn in betwixt two toothed wheels, and the integuments much lacerated; the last phalanx of the middle finger was completely crushed, and separated from the second, except at its fore parts, where a small slip of skin kept it adherent; this was removed shortly after the accident, and the fingers dressed at first with adhesive straps, the day before admission had poultices applied. Last night began to experience severe pain in fingers, which, before yesterday, had been tolerably easy; at the same time, was seized with tetanic symptoms, of stiffness of the muscles of the neck and lower jaw, and pain at epigastrium.

On admission to-day, at 2 P. M. the symptoms above related, somewhat aggravated, but did not prevent him walking up to the hospital; there is at present slight rigidity of the sterno-mastoid muscles, deglutition easy. The second and last phalanges of the injured fingers are completely gangrenous, and the integuments separated from the first, exposing the bone, of a black colour. Has severe pain in bruised fingers, very much increased on the slightest pressure; pain does not stretch up arm. The bones of the second phalanx of both fingers are fractured; the fore and little fingers are uninjured. Bowels are easy. Had 12 grains of calomel immediately on admission, and 14 leeches applied to the nape of the neck, and at 6 P. M. both bruised fingers were removed. The middle finger was taken off at its junction with the metacarpal bone, and the two last phalanges of the ring finger. Torsion of the arteries was used in place of ligatures, to stop the hæmorrhage, (a practice I have always adopted in amputations of the fingers and toes) during the operation, of which he complained much; had distinct opisthotonos. The calomel not having operated, was ordered sulph. magnes. \mathfrak{z} ii. tart. ant. $\frac{1}{4}$ gr., o. h.

23d, The salts and tartar emetic were continued every hour during the night. Bowels have been freely opened; vomited occasionally. Muscles of the back and belly have become rigid, and at times distinct opisthotonos occurs; is unable to open his jaws so far as to put out his tongue, the attempt to do so generally brings on general spasms. Complains much of pain of right breast. Pulse 140, full and soft; skin moist; slight head-ache; makes water freely; has some difficulty in swallowing. *Cont. tart. antimon. gr. $\frac{1}{4}$ tantum. o. h. Omitt. sulph. magnes. Hab. acetat. morph. gr. $\frac{1}{2}$ o. h.; Fricet. pect., c. tinct. opii. et sap., et colli nuch. app. vesicat.*

10 P. M. Spasms less frequent, but more severe; can open mouth better; has had no stool since visit at 1 P. M.; has taken regularly the quantity of morphia and tartar emetic prescribed; feels drowsy, and has vomited a little. Pulse 160, full, and rather hard; water has been drawn off by catheter. *Repet. sulph. magnes. et tart. antimon. ut antea.*

24th, Died this morning at 7, the spasms continuing both frequent and severe.

Inspection, 24 hours after death. The body was allowed to lie the usual way on the back till the time of inspection. The calvarium and spinous ridges were removed, fully exposing the theca vertebrarum, down to the cauda equina; there was no effusion on the brain or its membranes, and its substance was natural throughout. No effusion existed between the theca and the vertebrae; the theca was healthy, and betwixt it and the spinal cord was a preternatural quantity of serum. The cord itself was of a pale colour. The nerves on each side of the remaining phalanx of the ring finger were very vascular. On tracing upwards the ulnar nerve from this point to the elbow, it was of its natural colour, but here again it became very vascular for about the extent of 2 inches. In the axilla it again presented a similar appearance as at the elbow, the portion of it intervening betwixt these two points being healthy. Tracing the median nerve in the same way as the ulnar, it was found perfectly natural, from its digital branch, which supplied the radial side of the ring finger, (and which, as stated above, was much inflamed,) till about the middle of the arm, when it again presented an inflamed appearance for the extent of $1\frac{1}{2}$ inch. The portion of it intervening betwixt this part and that confined to the axilla, where it again became vascular, was natural. This vascularity throughout, was not confined to the sheaths of the nerves, but occupied their substance; the radial and superficial nerves of the arm, along with its veins and arteries, were perfectly natural; the lumbar nerves were unaffected; the œsophagus was examined, and found healthy; the trachea appeared inflamed, and contained a large quantity of greenish coloured mucus; the other thoracic viscera and digestive organs natural.

The plan of treatment followed in the above cases may be considered as purely empirical, indeed, the treatment of this disease may be said to have been hitherto uniformly so, and must continue so while the seat and nature of the disease is unknown, as remarked by Mr. Cooper, in his excellent Surgical Dictionary,—"Nothing is a more certain proof of our not being acquainted with any very effectual method of treating a disease, than a multiplicity of remedies, which are as opposite as possible in their effects." To give even a summary of the remedies employed, and the plans of treatment strongly recommended, would occupy too large a space, and be of little use, from all of them being founded upon conjecture. Although the morbid appearances in the two inspections related correspond very closely, it would perhaps be rash to found upon them (until confirmed by other cases) any certain plan of treatment; yet, I think I would be warranted in treating any case of the kind which might occur, as a local inflammation of the nerves leading from the seat of the injury, the interruption of the suppurative process in the wound being one of the first appearances. When the tetanic symptoms arise from fracture of any of the fingers or toes, or even compound or comminuted fracture of the larger extremities, we might be warranted in having recourse to amputation; at all events, a strict antiphlogistic treatment, with the application of numerous leeches in the course of the affected nerves, followed by blisters, ought not to be neglected; warm poultices, stimulating fomentations, or the turpentine liniment, ought to be applied to the wound, and these local remedies, accompanied with the free exhibition of emetic tartar, either combined with sulph. magnesiae dissolved in water, or with calomel and opium in small but repeated doses, so as to act both on the skin and bowels—the torpid state of the latter in this disease, indicate an interruption or weakened state of the nervous system, which may arise from the increased expenditure or exhaustion of nervous power by the diseased parts.

66. *Wound of the Trachea—Occlusion of the Larynx—Aerial Fistula.*—M. REYNAUD has recorded in a late number of the *Journal Hebdomadaire*, a case of this description. The subject of it was a man named Leblanc, twenty-five years of age, who was compelled to fly his home in consequence of a criminal offence, and seclude himself in another part of France. Three years afterwards, observing some gens-d'armes approaching him, and suspecting that

they were in pursuit of him, he resolved upon suicide. Seizing upon a bistoury, he always carried about him, he plunged it into that part of his throat corresponding with the space between the cricoid cartilage and trachea. The point of the instrument being directed upwards, it entered the larynx, and made its way out again, being directed from one side to the other. A profuse hæmorrhage ensued; and his answers to the *gens-d'armes* were not intelligible. They conveyed him to the nearest village, where he was unable to procure professional assistance for several hours. It was found necessary to introduce fluids into the stomach, for the purpose of alimentation, by means of a tube, and in twenty days the patient began to have some power of articulation. But in proportion as the external wound healed, the difficulty of breathing increased; and in six weeks after the accident, the unhappy Leblanc, fearing the officers of justice, contrived to make his escape to a distant part of the country, where he took refuge with his brother. Then the terrible difficulty of breathing suggested to Leblanc the idea of re-opening the original wound, in hopes of either putting an end to his life or his sufferings. With this intention he took an opportunity of pushing a knife through the cicatrix, and thus giving a free vent to the respiration. In this auto-operation, Leblanc made an opening into the pharynx, but of small extent. His brother arriving in an hour, was terrified, and applied to the magistrate of the place, who procured a physician to examine into the state of the patient. He was conducted to the *Hôtel Dieu* of Rheims, where an attempt was made to reunite the wound; but the difficulty of breathing which ensued, caused them to abandon the attempt. The event was left to nature, and in a fortnight the wound of the pharynx was healed. In proportion as the laryngeal wound healed, however, the dyspnœa increased, as on the former occasion; and to prevent suffocation, the patient himself constructed a tube of lead, two inches in length, and more than an inch in circumference, which he introduced, with some difficulty, but which gave him complete facility of breathing. He was obliged, of course, from time to time, to remove the tube, in order to clean it, and give issue to accumulated mucosities. In two months, he was completely well, with the exception of the inconvenience of the tube. And now the unhappy man was brought before a tribunal of justice, and was condemned to death. The severity of the sentence was, however, mitigated into perpetual labour. He was sent to work at a public construction in Toulon, where he arrived on the 11th of September, 1822. There he worked till the month of August, 1825, when the leaden tube slipped into the trachea, and became impacted at the origin of the right bronchus. There it excited constant and violent fits of coughing. He was sent to the hospital, and the instrument was extracted by a surgical operation, no details of which are given. During the patient's stay in the hospital, M. Renaud ascertained the complete occlusion of the larynx, by various experiments; and yet the patient was able to articulate many words with very considerable distinctness. Many of the most distinguished medical men of Toulon corroborated these facts. They all became convinced that the articulation of sounds in Leblanc's case, was made in despite of the entire occlusion of the larynx. This man could speak so distinctly, as to be heard and understood at some distance. There were certain words and letters, however, which he could not pronounce, as, for example, the letters *a, c, l,* and especially *o*. When he attempted to speak, he opened his mouth wide, depressed the larynx, and then, by a violent effort, expelled what air he could, as if by the act of coughing. Leblanc became the subject of repeated attacks of bronchitis, which ended in phthisis, of which he died on the 28th of July, 1828.

The dissection was made in the presence of the Council of Health, and various officers of the hospital. The complete occlusion was satisfactorily proved, the obliteration of the passage being where the trachea joins the larynx. The problem remains to be solved how Leblanc could speak, under such circumstances. Our readers may remember the case of Mr. Price, of Portsmouth, who still breathes through a tube in the trachea. In his case there is a small

aperture still for air, though not sufficient for respiration. His voice is almost extinct.—*Med. Chir. Rev. July, 1831.*

67. *Case of severe Scald treated by Nitrate of Silver.*—"The following case of severe scald, by an anonymous correspondent, demonstrates the utility of the nitrate of silver in this kind of affection, while it exemplifies its powers in changing and controlling the action of the capillary vessels.

"A little child, five years old, was pushed backwards by another child, whilst naked, into a large pan of scalding water which had been just taken off the fire. It was taken out as quick as possible, and yeast was applied upon the injured parts. It was visited one hour after the accident. The whole of the back as high as the shoulder-blades, and as low as the middle of the thighs, was found severely scalded, the cuticle removed from some parts, and in other parts raised into large vesications. The whole of the belly, the penis, scrotum, and thighs, were also in a similar state, but not so severely scalded as the back. An opiate was administered, and the yeast was removed with a sponge and warm water; it was well that no oily application had been used, as its removal would have required more trouble and have given more pain. The loose cuticle was removed with that of all the larger vesications, and the small ones were punctured, so that a clear surface was obtained, to which the nitrate of silver might be applied.

"The whole surface was then moistened with pure water, and a long stick of the nitrate of silver was applied flat, once over the whole surface, and a little on the surrounding healthy skin. A little linen just moistened was then past over every part to diffuse the nitrate of silver, so that no spot might be left untouched. The child cried much less than was expected when the nitrate of silver was applied on the denuded cutis. The back on which the child would have to lie was then covered with neutral ointment spread upon linen, secured by a bandage. The thighs and belly were left exposed to the air to form an adherent eschar, being defended by a fracture cradle.

"On visiting the child about eight hours afterwards, it was reported to have fallen asleep in a quarter of an hour after the application of the nitrate of silver, and to have complained of no pain since. There appeared no constitutional disturbance.

"The very first morning after the accident this little patient was turned on his side enjoying some playthings with several playfellows who were by the side of his bed. One part on the side of the thigh was much swollen and inflamed. It was discovered that the nitrate of silver had not been applied upon it. The whole of the belly and the other parts of the thighs exposed to the air looked very well, with scarcely any vesications; the eschars were removed in two places where the tapes of the bandage had crossed the belly; these parts were now defended by means of a small plaster of neutral ointment spread on linen. On some parts the eschars were floating on the serum, these afterwards became adherent. The scrotum and penis were much swollen, but gave no pain. The nitrate of silver was applied on the part not attended to at the first dressing.

"On the second day the child was going on well; some of the eschars were becoming adherent; the scrotum and penis continued much swollen, but there was scarcely any pain, and that on the belly. There was a slight heat of skin, and tongue was a little loaded. A purgative with senna and salts was given.

"On the third day nearly the whole of the eschars were found to be adherent, and the scrotum and penis less swelled.

"On the fourth day the eschars were quite adherent on the belly, and the penis and scrotum were of their natural size.

"On the fifth day the plasters of neutral ointment were removed from the back, which presented an appearance of a recently blistered surface, in a healing state, with some loose cuticle partially attached; there was no appearance of suppuration.

"In several days more the back was healed, except in two or three small parts, which were scalded more deeply than the rest, and were covered over with coagulable lymph, nor the least suppuration having taken place. The eschars were peeling off the belly, leaving the subjacent surface quite healed.

"On the tenth day this little patient was out of doors, and on the twelfth at school, every part being quite healed.

"Mr. Higginbottom, in his Essay on the use of the Nitrate of Silver, makes the following observations on burns and scalds:

"I have found that, by slightly passing the nitrate of silver once over a burnt surface, the pain is increased for a short time, but then totally subsides, vesication appearing to be prevented; the black cuticle peels off in a few days, leaving the part well. In cases in which the cuticle has been removed, the nitrate of silver applied on the surface induces an adherent eschar, and prevents the consequent ulceration." p. 149.

"I have not had an opportunity of using the nitrate of silver in very extensive recent burns, but I can have no doubt of the benefit that would accrue from it. It should, I think, be applied over the whole surface of the burn or scald once only but as in external inflammation; then the parts most severely burnt should be covered with lint, and the whole of the burnt surface with the neutral ointment spread on linen, a bandage being applied to retain the dressings in their places. I should expect that the inflammation would be checked, and the consequent vesication, ulceration, and sloughing, in a great measure prevented, except in those places where the fire had actually destroyed the parts deeply. I should not examine the parts again before the fourth or fifth day; and if the dressing adhered I would let them remain during another similar period. The application of the nitrate of silver should be repeated in the same manner, as might appear to be required. I think the burn would then be limited in its extent, and would consequently be less dangerous; for the danger is generally in proportion to the extent of surface destroyed. The nitrate of silver has certainly the property of removing the irritability of the whole surface to which it is applied, and cannot add much to the pain of the burn itself." p. 150.

"These anticipations appear to be correct when the nitrate of silver is applied to a burnt or scalded surface from which the cuticle is not removed. It has the immediate effect of subduing the heat or burning pain, preventing vesication, and causing it to terminate by resolution.

"When the skin is denuded of the cuticle and the nitrate of silver is applied, this most irritable and inflamed surface is converted into an insensible covering, which remains adherent until the inflammation is gone, and the new cuticle is formed underneath, at which period it loosens and drops off.

"The application of the nitrate of silver is equally efficacious whether the burned or scalded surface be afterwards exposed to the air or covered by the neutral ointment. In the first case an adherent eschar is formed in two or three days; and in the second the effects of the nitrate of silver appear to continue for four or five days, producing a constant flow of serum, which continues until all the inflammation, irritation, and pain, are gone. It is possibly of little consequence which plan is adopted, as both are healed about the same period. The adherent eschar would be preferable in parts exposed, as the face and neck; or the chest, belly, or legs too, if defended by a fracture cradle, and the patient in bed.

"The advantages of the nitrate of silver in the treatment of burns and scalds appear to be of the very first importance. We have at once a covering for the injured and very irritable surface superior to any other formed and composed partly of the very surface itself. The nitrate of silver acts as an *anti-inflammatory* agency both immediately and for several days after its application.

It may be safely applied over the head, chest, or abdomen, and it is not, like arsenic, and some other remedies used externally, liable to be absorbed into the system."—*Edinburgh Medical and Surgical Journal*, April, 1831.

68. *Treatment of Syphilis without Mercury.*—Dr. TRAILL, of Liverpool, in an interesting account of the general hospital at Hamburg in the *North of England Medical and Surgical Journal*, for June last, furnishes us with the following observations on the treatment of syphilis in Hamburg. "In so great a seaport, in so luxurious a city, it may readily be supposed that syphilis is not a rare disease; and from the constant influx of persons from every quarter of the globe, one might be led to conclude that the disorder, in its most disgusting forms, might be found in the hospital of Hamburg. In this, however, we should be mistaken. I had the satisfaction of accompanying Dr. Jacobson, of Copenhagen; Dr. Eckström, of Stockholm; and other eminent physicians, to the hospital, where Dr. Fricke had the kindness to submit to examination a great number of syphilitic cases, and to detail the history of each, as he pointed out the various stages of the complaint.

"The public prostitutes, on the first symptoms of this disease, are compelled to enter this hospital; and we had full leisure and opportunity to examine the various forms of the disorder to which they are liable.

"The mode of inspection is very minute, and is regularly practised, in all cases, by the medical officers, with a patience and manliness to which there is among us no parallel. Every change of symptoms perceived by Dr. Fricke is announced, and immediately entered in the case book by one of the assistant surgeons. Among thirty or forty females of that class, then minutely inspected, I did not discover a single instance of deep chancre with retorted edges. The chief symptoms were slight ulcerations, often little else than excoriations, *condylomata* or warty excrescences; and in incipient cases, specks of purulent matter filling the orifices of the mucous follicles or glands on the parts within the *labia*, and which were often so minute as to require a magnifier to render them apparent. In this insidious form of the disease, as Dr. Fricke remarked, the several symptoms of syphilis may be communicated by a female, without her being at all aware that she is diseased. Such instances he stated as having often fallen under his observation. He pointed out many examples of this affection of the mucous follicles within the *labia*; and, with a fine silver wire, demonstrated the existence of minute collections of matter in them, and, by slight inflammatory action, for a time closing their orifices. Among all the prostitutes here collected, I did not perceive a single case of ill-conditioned chancre, or of corroding ulceration; and even simple buboes were not very numerous.* Of secondary syphilis, with the exception of a few cases of cutaneous eruptions, and ulcerated throats, chiefly among seamen, there were fewer traces than I ever saw among so many patients labouring under this disease. *Blenorrhœa impura* and *leucorrhœa* are very frequent, especially among the prostitutes.

"Every form of syphilis is treated in the Hamburg hospital WITHOUT MERCURY IN ANY FORM: and I have the authority of Dr. Fricke, and of all the other medical gentlemen of the establishment, for the important fact, that they never find the disease to require its use, and that this mode of treatment is not more liable than the mercurial one to be followed by what are considered as secondary symptoms.

"I did not find a single instance of any person disfigured by the disease; except one female, whose nose had fallen in *before* she was received in the house; and she had previously undergone a severe course of mercury in Berlin. Since her admission here, she has been treated on the anti-mercurial plan; and when I saw her, she appeared to be convalescent. This method of cure consists in frequent ablutions with tepid water, a very rigid low diet, almost amounting to starving, brisk purgatives and rest. Zinc and saturnine lotions are occasionally employed, but the circumstances above enumerated are the great means of cure. Even sarsaparilla is little used, and mercurials never. The success of this

* The ill-conditioned chancre with ragged retorted edges might indeed be found among sailors received into the hospital; but the remarkable exemption of the public prostitutes from the severer forms of the disease is not a little worthy of attention.

practice is established by the experience acquired in the present hospital and its predecessor, at least as far back as fifteen years ago.

"Dr. Eckström, physician to the king of Sweden, informed me that the same treatment had been still longer pursued at Stockholm with equal success; and that the practice was adopted at Hamburg from the example of the Swedish hospital; which however borrowed it from the Royal Hospital at Copenhagen, where it had been established by the experience of a Danish physician, a pupil of our celebrated John Hunter.

"After the demonstrations were concluded, Dr. Fricke asked my opinion on the nature and treatment of the diseases he had shown. On remarking that few of the cases among the prostitutes appeared to have what we considered decided marks of virulent syphilis; and that many of them would be considered little more than excoriations, or the consequences of gonorrhœa; he justly remarked, 'Whatever opinion might be entertained on that subject, it was no less remarkable, if we refuse to give the name of syphilis to these diseases, that, among the class of persons most exposed to venereal infection, the public prostitutes, in one of the largest seaports of Europe, proverbially dissipated, true syphilis is unknown: for we had seen every variety of the disease which is usually met with in Hamburg.'

"He further added that the anti-mercurial mode of treatment had *never*, to his knowledge, been followed by diseased bones, unless where much mercury had been previously used; and the remark was confirmed by Dr. Eckström."

69. *Case of Spontaneous Varicose Aneurism.*—By JAMES SYME, Esq. F. R. C. S. L. and E.—Varicose aneurism, or a sac containing blood, and communicating with the trunks of both an artery and vein, is a rare occurrence; and the only instances which have hitherto been recorded either of it, or the analogous condition of aneurismal varix, where the blood passes at once from the trunk of an artery into that of a vein, originated from wounds. The femoral, popliteal, and subclavian vessels, and more frequently those at the bend of the arm, have been thus affected, in consequence of having their contiguous coats divided by some sharp-pointed weapon; but no instance has hitherto been observed of the opening taking place spontaneously, and I therefore think it right to relate the following case of varicose aneurism, which affected the aorta and vena cava, and occurred without any external violence.

Robert Scott, aged twenty-two, in the beginning of October, 1830, began to complain of pain in his back and limbs, throbbing in the epigastric region, and an incessant whizzing noise, which seemed to proceed from the same part. His sufferings became so severe in three or four weeks, that he found it necessary to confine himself to bed, and then came under the care of my friend Dr. Robertson, who soon afterwards requested me to see him. He complained greatly of pain in his back, and coldness of his feet; but what seemed to occasion both him and his friends most concern, was the constant noise that has been already mentioned. On examining the abdomen while he lay on his back, I readily felt the pulsation of a large tumour; but it was not so strong and incompressible as that of an ordinary aneurism, and in the erect posture might have readily escaped observation.

The treatment consisted in the use of all those means which tend to moderate the force of the circulation, but proved quite unavailing. The patient's sufferings became progressively aggravated, and a new symptom made its appearance, viz. œdema of the inferior extremities and generative organs. The swelling of these parts attained a degree that I never saw equalled, and occasioned an extraordinary contrast between them and his superior extremities, which were thin and emaciated. In the latter end of January the patient died rather suddenly, immediately after complaining of a pain at his heart.

After death, the œdema, which had previously been confined to the parts below the pubis, diffused itself over the whole of the body, so that when the dissection was commenced by the usual longitudinal incision of the integuments

of the trunk, they were found to be distended fully three inches, and a copious stream of serous fluid continued to issue from them, during nearly the whole of the subsequent examination.

In order to expose the disease completely, I removed the thoracic and abdominal viscera, and then traced the aorta from the commencement downwards. Having found an aneurismal tumour seated at the bifurcation of the artery, which adhered intimately to the vena cava and vertebræ, I dissected out the iliac vessels, cut them across some inches beyond their division, and then sawed away the bodies of the lumbar vertebræ, together with the promontory of the sacrum.

On examining more particularly the preparation thus detached, we observed that the tumour was of a flattened oval figure about the size of a large orange; that it adhered to, and had caused absorption to some depth of the bodies of the three lowest lumbar vertebræ, and that it was intimately connected with the vena cava, which appeared much flattened, distended, and thickened. It was now suggested that there might be a communication between the aneurism and vein, and on making a small opening into the sac, so as to evacuate its contents, we found this actually to be the case. Immediately above the bifurcation of the vena cava there was a round aperture somewhat larger than a sixpence, which afforded a free entrance into it from the aneurism.—*Ed. Med. and Surg. Journal, July, 1831.*

70. *Lithotriety*.—We have already announced, Vol. VII. p. 246, that the general administration of hospitals had given to M. Civiale the charge of a ward in the Hospital Necker, for the treatment of calculous patients by lithotriety, and we have also given an abstract of the report of M. Civiale of the cases treated by him during the first year. This memoir was referred by the Academy of Sciences to a committee, and on the 26th of April last, M. Larrey, on behalf of that committee, reported, that without suspecting the accuracy of the statements made by M. Civiale, he thought it his duty to apply to the council of administration of hospitals to ascertain the number of patients sent to M. Civiale's ward, and the result of the treatment, and M. L. says that M. Civiale is mistaken as to the number of patients received into his ward. This number M. L. states to have been twenty-six, instead of sixteen as reported by M. C. M. Larrey further states that twenty-four of these patients were operated on, and that eleven have died. Several of these had undergone lithotriety. M. L. blames M. C. for presenting to the academy only the more prominent points in his practice, and he states that the number of patients who have died after submitting to lithotriety, is proportionally as great as those who die from the operation of lithotomy in the other hospitals of the capital. M. Larrey terminates his report with some compliments to M. Civiale for the zeal which he continues to display in the improvement of lithotriety, and he calls the attention of practitioners to the comparative results of lithotriety and lithotomy.

At the next meeting of the Academy, a letter was read from M. Civiale, in which this surgeon charges M. Larrey with having made several mistakes in his report. M. C. states, that he had received during the period stated in his report, but nineteen patients, of whom fourteen only had calculi; to this number two must be added, included in M. C.'s report, and who were operated upon in private practice. Four of the patients received had no calculus; four of those who had a calculus were not operated on; two who had submitted to the preliminary trials could not support the treatment. Thus the number operated on was eleven, and not twenty-four, as said by M. Larrey. The error of the latter arose, according to M. C., 1st, from his having included in the period of his report four months more than was included in that of M. Civiale; 2d, from his having considered all the patients as calculous; 3d, from his supposing all the calculous patients to have been operated on. M. Civiale avers that several patients whose deaths are attributed by M. Larrey to lithotriety,

have never been operated on; others whose condition is said to have been exasperated by attempts at the operation have never been subjected to these trials; and finally, that a patient said to have died in consequence of cystotomy, did not undergo this operation.

In answer to this, M. Larrey referred to the documents joined to his report, and which were deposited with the secretary of the Academy.

MIDWIFERY.

71. *Cæsarean Operation*.—In the *Archives Générales*, for February last, we find an extract from the thesis of M. JOLLY, a Parisian graduate, in which the author gives an account of the remarkable success of his father, a surgeon of Château-Thierry, in the performance of the Cæsarean operation. He has operated six times, five of his patients being country-women, and the sixth an inhabitant of the town. In all the labour had lasted at least forty-eight hours before the operation was performed; and the waters had been discharged. In one patient only of the six no fatiguing attempts had been made by midwives or accoucheurs to finish the labour. He always made the incision on the linea alba, between the navel and pubes, and divided the uterus in the same direction, taking care to restore it first to the perpendicular position if it was inclined. There was never any material hæmorrhage; no patient, indeed, lost more than two ounces of blood. In dressing the wound he always had recourse to the gastroraphy, which, instead of producing the ill consequences usually ascribed to it, appeared to him always to contribute greatly to the cicatrization of the wound. In two of the six cases no untoward symptom whatever followed the operation, and the cure was perfected before a month expired; in two others a smart degree of inflammation of the abdomen supervened, but was successfully combated by venesection, baths, and fomentations; and the remaining two died evidently of metropéritonitis, one on the fourth day, the other at a later period, when there appeared every chance of her recovering under the antiphlogistic treatment. Of the six infants four were born alive and survived; but two were dead after the operation was concluded, although they were thought to have been alive before it was performed. In no instance did hernia ensue; but there was always some prominence of the abdomen at the cicatrix, which had diminished from six inches in length to three only. These results are much more favourable to the operation than any previously published.

72. *Obliteration of the Vagina*.—M. LOMBARD, of Geneva, communicated to the Royal Academy of Medicine, at their sitting of the 15th of March last, the case of a female, the mother of four children, and who when pregnant for the fifth time, injected into her vagina, for the purpose of exciting abortion, some sulphuric acid, which produced inflammation, and the obliteration of the superior two-thirds of this organ. The woman, nevertheless, went her full time, and after thirty-six hours labour, an unsuccessful attempt was made to open the passage with the knife. The patient died. The Cæsarean section was then performed, and a dead infant found. The uterus was ruptured at its middle on the left side, and to the extent of four or five inches.—*Revue Médicale*, April, 1831.

MEDICAL JURISPRUDENCE AND MEDICAL POLICE.

73. *On the Grinder's Phthisis*.—It has long been known that of all unhealthy trades, none is equal in its ravages to that of the steel-grinder. The public attention has been for some time strongly attracted to the subject in Sheffield, by the miserable fate of the workmen of that class in the town; and, in conse-